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SUDDEN DEATH

IN A CASE IN WHICH

CHLOROFORM WAS BEING ADMINISTERED.

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[REPRINTED FROM THE EDINBURGH MEDICAL JOURNAL, DECEMBER 1855.]

THE sudden death of a lady, while under my care for the extraction of some teeth, having been reported in several of the journals as a case of "Death from Chloroform," and having created a considerable sensation in the public mind, I consider it necessary to communicate the particulars of that unfortunate case, so that the profession may be enabled to judge as to the cause or the association of circumstances which brought about the fatal result.

Mrs H——, aged 36 years, tall, and rather delicate in appearance, called, at 3 P.M., at my house, on Tuesday the 30th October last, accompanied by her husband, for the purpose of having the lower incisor teeth extracted. With the intention of dissuading her from the use of chloroform, I remarked that the operation would be very simple, as the roots were single and by no means firm; but she replied, "Oh, but I must have chloroform. You have given it to me before, and you must give it to me now." Her husband expressed no wish in the matter; and as I had administered chloroform to her on *four* previous occasions during the last twelve months, without any unusual effect, and as I was aware that her medical attendant in the country gave it to her during her accouchement, some months previous to her first visit, I consented to its employment on this occasion also.

While preparing to sit down in the operating chair, she said, "Have you heard of that case of death from chloroform which occurred lately in my neighbourhood, while a person was having a tooth extracted?" and, again, when seated, she observed, "I feel rather nervous." My son assisted me in administering, in the usual way, the chloroform, which was the preparation of Messrs Duncan and Flockhart. Mrs H—— had only taken about nine or

Read before the Medico-Chirurgical Society.

ten inspirations, obtaining but the partial influence of a quantity short of a ziss poured out from the bottle, and inhaling it for a space of time certainly less than a minute, when she said, "You must not operate until I am quite insensible;" and again, "I am not over yet, you must give me more; I am not over yet;" and *immediately, even while speaking*, she gave a convulsive start, and with a stertorous inspiration, and with the eyes and mouth open, sunk to the floor.

The suddenness of this attack, the expression of the countenance, and the attitude, altogether so different from anything which I had ever witnessed from chloroform, although I had up to that time on my register 2096 cases, in which I had operated with the use of chloroform, immediately alarmed me, and I instantly desired my son to run for Professor Simpson, whose house is close at hand, in the meantime doing all that I could think of to resuscitate the patient; and as Dr Simpson was fortunately at home, he came to my assistance, accompanied by Dr Priestley, in less than five minutes from the time that the accident had happened. The means employed were pulling forward the tongue and keeping up artificial respiration; and as the face was greatly congested, bleeding was attempted, but not more than six or seven ounces could be procured. Galvanism was applied alternately with artificial respiration, but produced no permanent benefit. After artificial respiration had been carried on for some time, repeated spontaneous inspirations were remarked, but at no time more frequent than five in the minute. The pulsations of the radial artery were at first not sensible, but, while the artificial breathing was going on, they became more distinct, and the livid appearance of the face in a great measure disappeared. The same improvement was also noticed when the galvanic current excited the muscles of respiration, which at first gave hopes of resuscitation. But, occurring as they did, more than once, ultimately declined, and after one hour and a quarter (4 20 P.M.) of the most energetic exertions (especially on the part of Dr Simpson), the case was reluctantly abandoned as hopeless, life being manifestly extinct.

The following is the report of the *post-mortem* examination, which was made twenty-eight hours after death, by Drs Simpson, Peddie, and Priestley, along with myself and son:—

Post-mortem examination of Mrs H—, twenty-eight hours after death.

The general appearance of the body presented nothing unusual. The deep livid colour of the integument of the head and neck, and the injection of the conjunctivæ, which were observable at the time of death, had in a great measure disappeared.

On laying open the abdominal walls, the organs contained in that cavity were found, in most respects, healthy. The capillaries of the intestines were, however, distended with blood, giving to the convolutions of the bowels a more than usually deep red colour.

The liver, too, was firmly adherent by the whole of its convex surface to the diaphragm, by old lymphic exudation, but when cut through, its substance revealed no other morbid change.

The uterus was healthy, and its appendages healthy.

In the dissection of the thorax, the lungs did not appear more than ordinarily congested, except posteriorly, where they were of a deeper colour, and contained more blood; this was, doubtless, the result of *post-mortem* circumstances.

When the pericardium was laid open, the heart was found preternaturally small in comparison with the conformation of the body; the right side was flaccid and full of blood, while the left side was comparatively firm, and contracted. On dividing the descending vena-cava, a quantity (probably six or eight oz.) of dark, half coagulated blood escaped from its tributaries, and from the right auricle.

The extreme thinness of the walls of the right auricle and ventricle were remarked when they were laid open; in fact, in no portion of the muscular substance of the right ventricle did the thickness exceed one-half the normal proportions, and its component tissue was soft and lacerable.

Both right auricle and ventricle were gorged with dark blood, and the valves belonging to both cavities were healthy.

The left ventricle was contracted, and little blood remained in either ventricle or auricle of this side. The muscular parietes were thinner than usual, but the difference was less marked than on the right side.

Under the microscope, the muscular fibres of the right side of the heart, more especially of the ventricle, were much altered in appearance. The transverse striæ were indistinct, or had disappeared entirely in some portions, while fatty granules were everywhere observable, arranged in lines, along the direction of the fibres.

The same state was found to be present, but in a less degree, in the muscular tissue of the left ventricle; here, however, the fatty particles were few and scattered, and the transverse markings, for the most part, distinct.

The vessels of the brain were turgid with blood, but, beyond this, the cerebral organ appeared healthy.

(Signed)

J. Y. SIMPSON.

A. PEDDIE.

W. O. PRIESTLEY.

To these statements I have only to add, that I have been informed that Mrs H——'s father died some years since of disease of heart, being found dead in his chair.

MURRAY AND GIBB, PRINTERS, EDINBURGH.

1. Young's

